

REMARKS/ARGUMENTS

Claims 1-24 are present in this application. By this Amendment, the specification and claims 1, 2, 8, 13, 14, 17, 19 and 22 have been amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 1, 7, 10, 12-15, 21 and 24 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 4,576,053 to Hatamura. This rejection is respectfully traversed.

In paragraph 3 of the Office Action, the Examiner contends that “Hatamura also teaches the placement of one of these pins at the boom pivot (116) and another at boom lift cylinder pivot (117),” referring to Figure 17. The Office Action then asserts that “Hatamura uses the measured stability to control the driving components” In this context, however, even assuming the Office Action’s characterizations of “boom pivot (116)” and “boom lift cylinder pivot (117)” are accurate, it is not clear how the Office Action interprets Hatamura to arrive at “measured stability to control the driving components.” In fact, Applicants respectfully submit that Hatamura is unconcerned with vehicle stability and does not even remotely appreciate use of its load detectors to either (1) assess vehicle stability or (2) control driving components based on the assessed stability.

Rather, Hatamura describes that various magnitudes and directions of forces can be determined for “materialising desirously-controlled operations such as constant-load digging, energy-saving digging, facilitation of sensor-control operations and achievement of high performance.” None of these functions relates to assessing vehicle stability and

controlling vehicle driving components based on such assessed stability. Hatamura is silent with regard to any structure or operation relating to vehicle stability, and as a consequence, Applicants respectfully submit that the rejection is misplaced.

Notwithstanding, in an effort to further clarify this distinction, independent claim 1 has been amended to recite that the control system determines a destabilizing moment based on the force components acting on the first and second force sensors pins and based on horizontal and vertical distances from the first and second force sensor pins, respectively, to a point around which the moment is determined to thereby assess boom lift vehicle stability. Claim 1 further recites that the control system controls the vehicle driving components based on boom lift vehicle stability. Independent claims 13 and 14 have been amended in a generally similar manner. Since Hatamura is unconcerned with determining a destabilizing moment as it relates to an assessment of vehicle stability, Hatamura lacks any teaching of determining such a destabilizing moment based on force components and based on distances from the load pins to a point around which the moment is determined. For this reason also, Applicants submit that the rejection is misplaced.

Still further, as referenced above, Hatamura lacks any teaching of applying its load pins for assessing vehicle stability of a boom lift vehicle, including a boom, a boom pivot, a main lift cylinder coupled with the boom, a main lift cylinder pivot, and vehicle driving components. Hatamura rather illustrates applications to a wheeled loader, a bulldozer and a dump truck, none of which is concerned with vehicle stability, which is

an important consideration in operating a boom lift vehicle. The Office Action's reference to "boom pivot (116)" and "boom lift cylinder pivot (117)" is a mischaracterization of the Hatamura disclosure and could only have been derived via hindsight in view of Applicants' own disclosure.

With respect to the dependent claims, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 6 and 20 were rejected under 35 U.S.C. §103(a) over Hatamura in view of U.S. Patent No. 5,224,815 to Abels et al. The Abels patent, however, does not correct the deficiencies noted above with regard to Hatamura. Indeed, neither Hatamura nor Abels provides any suggestion to modify the Hatamura patent to meet the presently-claimed features of the invention. As a consequence, Applicants submit that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is respectfully requested.

Claim 11 was rejected under 35 U.S.C. §103(a) over Hatamura in view of U.S. Patent No. 5,186,042 to Miyazaki. Miyazaki, however, similarly does not correct the deficiencies noted above with regard to Hatamura. Thus, Applicants submit that claim 11 is allowable at least by virtue of its dependency on an allowable independent claim. Withdrawal of the rejection is respectfully requested.

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Applicants acknowledge with appreciation the indication of allowable subject matter in claims 2-5, 8, 9, 16-19, 22 and 23. By this Amendment, claims 2, 8 and 22 have been rewritten in independent form.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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